

000-161

**United States
Environmental Protection Agency
Initial POLREP**

EPA Region 5 Records Ctr.



243458

I. Heading

Date: February 16, 1997

From: Len Zintak, Fred Micke, and Cindy Nolan, OSCs,
Region 5, USEPA

To: K. Mould, OSWER, Washington, D.C.
J. Maritote, EERB, (distribute)
T. Krueger, ORC, Chicago, IL
D. de Blasio, OPA, Chicago, IL
T. Powell, IEPA, Collinsville, IL
U.S. Coast Guard, District 8, New Orleans, LA
U.S. Fish and Wildlife service - Illinois
D. Henne, U.S. Depart. of Interior, Philadelphia, PA

II. Background

Site: IPC-TDF Tire Fire
Site No: NA
ERCS D.O. No: Not available; D.O. issued to EQM
Response Authority: CERCLA
NPL Status: N/A
Start Date: February 14, 1997
Approval Status: Emergency Response
Status of Action Memorandum: In draft

III. Incident Information

A. Type of Incident

According to U.S. EPA OSCs Len Zintak, Fred Micke, and Cindy Nolan, approximately 30,000 cubic yards of shredded tires were on fire in the cities of Cahokia and Sauget, St. Clair County, Illinois. The shredded tires are located at the IPC-TDF property (a 5-10 acre field) which is located approximately 2 miles east of St. Louis, Missouri, south on Illinois Route 3. The cause of the fire is unknown.

B. Preliminary Assessment Results

Air monitoring during the fire indicated elevated levels of particulates and volatile organic compounds (VOCs) in the immediate area of the fire. Off-site monitoring indicated these parameters to be below health and safety action levels. The surrounding area is industrialized with a gas station and fast food restaurants located across the street from the tire fire. About one-half mile east of the fire is a residential neighborhood. The fire produced a thick, dense black smoke in an

unstable inversion layer.

Based on previous Region 5 experience with fire tires; Carbon black, particulates, VOCs, and BETX compounds are the primary chemicals of concern from the fire. ATSDR when contacted by Region 5 confirmed the above and gave the Region recommended action levels for the above compounds. In addition, ATSDR recommended that we test for hydrogen sulfide and supplied an action level.

C. Situation

Upon arrival at the scene on February 14, 1997, the shredded tire piles were fully engulfed in flames. The fire continued to burn throughout the night. The local Cahokia and Sauget Fire Departments were the first responders to the incident (5:30pm Thur. [2/13] to 9:00am Fri. [2/14]), however they were unable to extinguish the fire with water. The shredded tires were located in many small piles on the 5-10 acre open field. Oil generated by the burning tires was visible within the slopes of the hills. Water and soil samples were taken on February 16.

Air monitoring equipment provided real-time data for organic vapors using a Flame Ionization Detector. Drager tubes were used to detect nitrous fumes. Particulate matter was sampled for using a RAM-1 aerosol monitor. All the Flame Ionization Detector (FID) readings were at background levels, which is less than 1 part per million (ppm). Drager pump readings were non-detect. The RAM-1 readings ranged from 2.3 mg/m³ 0.5-1 mile away from the plume to 4.07 mg/m³ 125 yards from the plume. All readings were taken within a 1.5 mile radius northeast of the smoke plume. Air monitoring was conducted hourly during the initial stages of the incident. Air monitoring was stopped after the fire was brought under control.

The ERCS contractors (EQM/CMC) started covering the burning piles with dirt from the site in the late afternoon of February 14 and got the fire under control at 5:00 am, February 15. No evacuations were required as the smoke plume from the burning tires did not impact nearby residents. The wind direction was from the west and therefore, the City of St. Louis was not impacted. The fire was worked from the upwind side.

The ERCS contractor thereafter continued to place dirt to create a uniform dirt cover (18 - 24 inch thickness) and began compacting the dirt cover in order to completely extinguish the fire. These activities continued until February 16, at which time all smoldering had been stopped.

START collected soil and water samples late in the morning of February 16. The soil samples were collected from the dirt cover. The water samples were collected from standing water resulting from the fire department response. Samples will be analyzed for volatile organics, semi-volatile organics, RCRA metals, and PCBs.

IV. Response Information

A. Status of Actions

All required emergency actions have been completed.

B. Next Steps

No further action is required at this time.

C. Key Issues

IEPA will address long-term site issues.

V. Cost Information

ERCS

Current D.O. Ceiling.....	\$50,000 (verbally approved by Acting Branch Chief)
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Cost through 2/15.....	\$28,597.54
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START

TDD Ceiling.....	Not yet available
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Cost through 2/16.....	Estimated at \$5,000
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